

# **Anyview Digital Microscope**

## **User's Manual**

### **Welcome**

Thank you for choosing Anyview digital microscope!

The Anyview digital microscope is an exciting new device that let's you view clear many micro- objects with professional software, and has a wide scope of applications, such as,

- Industrial Inspection
- Computer Parts inspection
- Telecom module inspection
- Scientific teaching tool
- Medical analysis
- School Research tool
- Insect dissection / examination
- Plant dissection / examination
- Skin examination
- Textile Inspection
- Collections / Coin/ Jewelry Inspection
- Printing Inspection
- And more.....

Please read this manual carefully before using Anyview digital microscope!

## Contents

Welcome .....	1
Contents .....	2
Product Specifications .....	3
Safety Cautions.....	3
Package Contents .....	4
System Requirements .....	4
Software Installation.....	5
Window XP OS Installation .....	5
Window Vista OS Installation .....	10
Anyview digital microscope Connecting .....	13
Anyview digital microscope operation.....	15
Anyview Application.....	16
Take Photo .....	18
Take Video .....	19
Take time lapsed Photos.....	20
Video Setting .....	21
Export to word .....	21
Export to word .....	21
Change Language .....	22
Snapshot Enable / Snapshot Disable .....	22
Photo Folder .....	22
Video Folder .....	22
The Real-time measurement.....	23
Scale .....	27
Addition Functions by clicking right-key on video .....	27
Full Screen Display and return .....	28
Image Process.....	28
Anyview player .....	34
Troubleshooting.....	34
Common Fix.....	34
Q&A .....	35

## Product Specifications

- u Operation system: Windows XP / Vista / windows7 and Mac OS
- u PC interface: USB 2. 0
- u Image Sensor: 2.0 Mega pixels
- u Video Capture Resolution 1600x1200, 1280x960, 640x480
- u Color: YUV or 24bit RGB
- u Lens: Dual Axis 27X & 100X Microscope Lens
- u Focus Range Manual Focus From 8mm to 300mm
- u Magnification Ratio 10X to 200X
- u White Balance: Auto.
- u Exposure: Auto
- u Light Source: 8 adjustable LED White Light
- u Power supply: 5V DC from USB Port
- u Size: 120mm (L) X36mm (R)
- u Transmission distance:2m

## Safety Cautions

1. Avoid touching the lens with finger to dirty it and protect the product from electrostatic damage.
2. Do not attempt to disassembly any part of this product.
3. Do not attempt to service this product yourself. Opening the covers may expose you to dangerous voltage points or other risks.
4. Storing and operating Anyview digital microscope at Temp: -10 ~ 45°C, Humidity: 45% ~ 85%, as this will extend Product life and prevent damage to the product.
5. Do not allow this product to have contact with water or other liquids. If water or other liquids enter the product interior, immediately unplug the product from PC. Continued use of the product may result in fire or an electrical shock.
6. Do not use any detergent or volatile solution, which will damage the camera case, painted surfaces and lens. Only use a soft cleaning cloth to clean it.
7. Do not place this product near a heat source or expose direct flame, avoid the lens damaged by high temperature or humidity
8. If the lens is dirty, please use a lens brush on soft cloth to wipe clean. Avoid touching it with your fingers. Exercise care to avoid scratching the lens.
9. Need to read Anyview digital microscope User's Manual before using and storing it.
10. To avoid electric shock, remove all electricity source before moving PC.

## Package Contents

The Anyview digital microscope package includes the following:

1. Anyview digital microscope.
2. CD ROM (Software) and Quick manual.
3. Stand(Plastic).
4. Calibration ruler.
5. 2pcs Transparent Covers.



## System Requirements

In order to install Anyview digital microscope, you will need the following minimal systems:

- ①. OS: Windows XP SP2 or later OS
- ②. CPU: Pentium IV 1.0G, Celeron, AMD Athlon
- ③. CD-ROM drive
- ④. Available USB port (if it is USB1.1, please use Anyview-basic.exe application inside CD)
- ⑤. 512MB RAM
- ⑥. 100MB available hard disk space
- ⑦. Graphic card: 16-bit

### **Recommended PC specification for optimal performance:**

- √ OS: Windows XP SP2 or later OS.
- √ CPU: Pentium IV 1.6G, Celeron, AMD Athlon or above
- √ CD-ROM drive
- √ Available USB 2.0

- ✓ 1G RAM or above
- ✓ 10GB available hard disk space or above
- ✓ Graphic card: 16-bit or above

## Software Installation

The following instructions will guide you to through the process of installing the Anyview digital microscope:

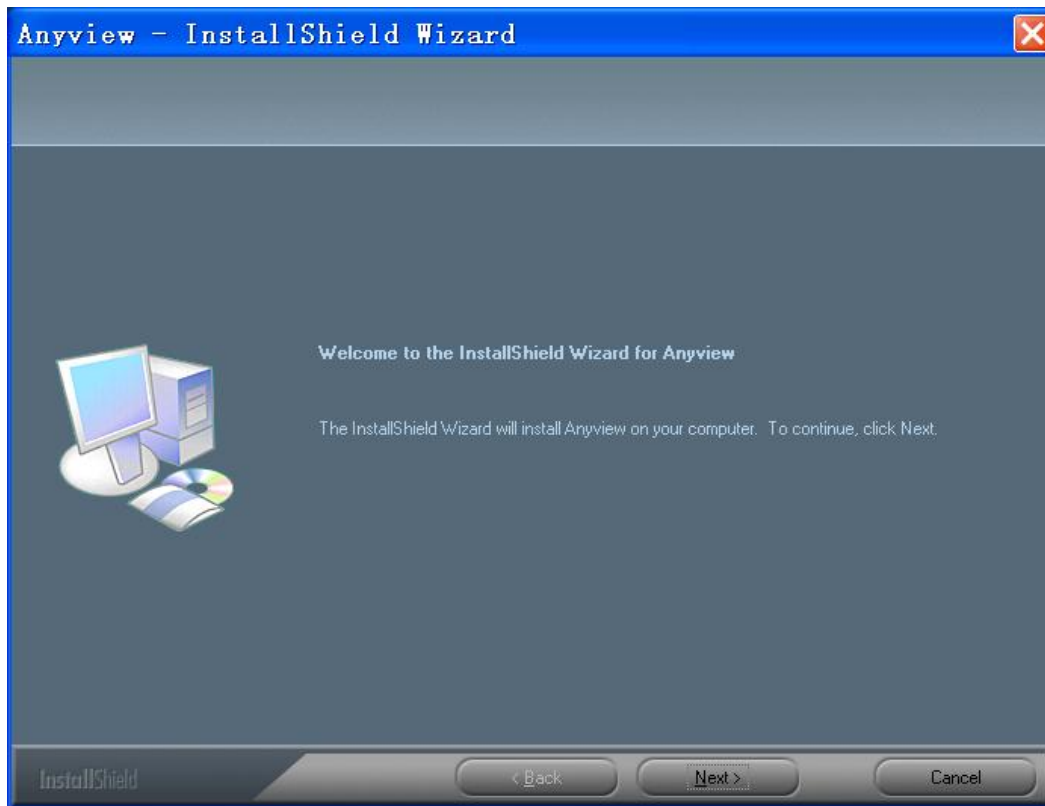
- I. Power on PC and place installation CD into CD-ROM driver, do not connect USB Cable from Anyview Microscope to PC before software installation.
- II. Select “Install Software”, and follow the instructions to complete installation.
- III. As driver installation completed, and if system asking for restarting, please restarting PC.

## Window XP OS Installation

1. Place the installation CD-ROM into CD-ROM drive, the installation program should be started automatically. Otherwise, please execute the AUTORUN.EXE directly from the CD-ROM.



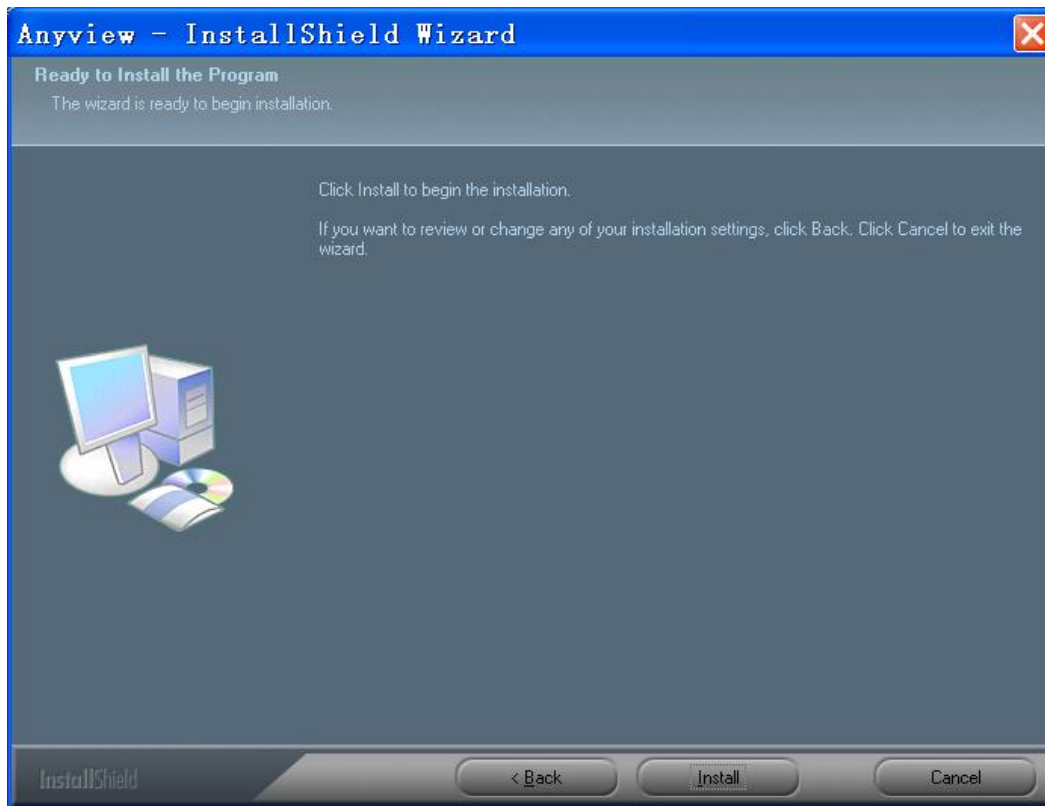
2. Select “Install Software” item, you will see the following popup .Press “Next” to proceed or “Cancel” to abort installation.



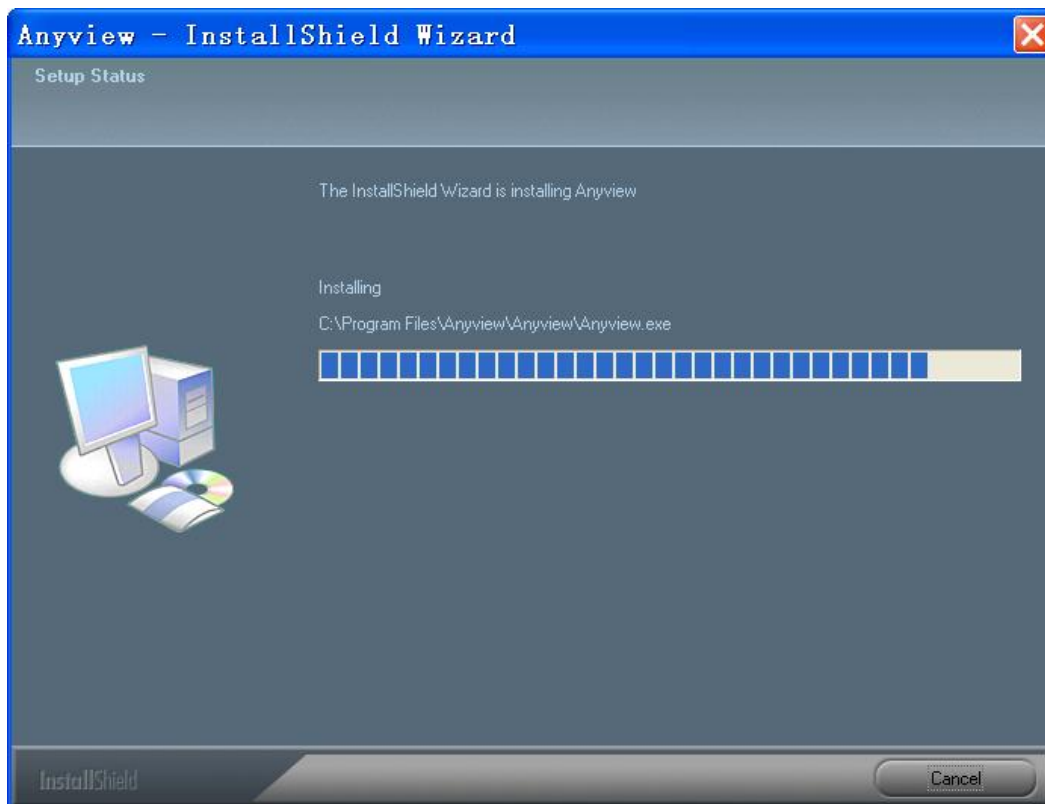
3. You will see the End User License Agreement. If you accept the License Agreement, then you can Click the “Next” button which is availability to process, or “Cancel” to abort installation.



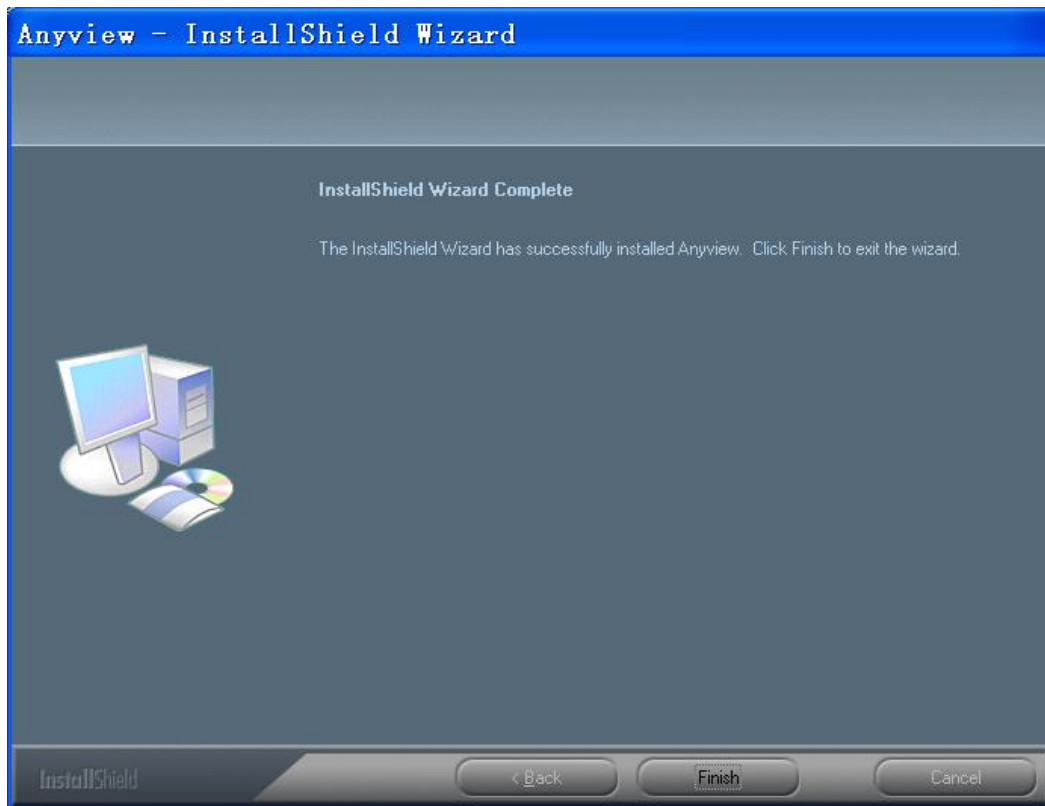
4. Click “Install” to start to install the application, click “Cancel” button to abort installation. Click on “Back” to back to read the End User License Agreement again.



5. You will see the following progress bar below indicating that the installation is proceeding. If click “Cancel” button, it will abort installation.



6. Waiting until you see the following popup and press “Finish” button.

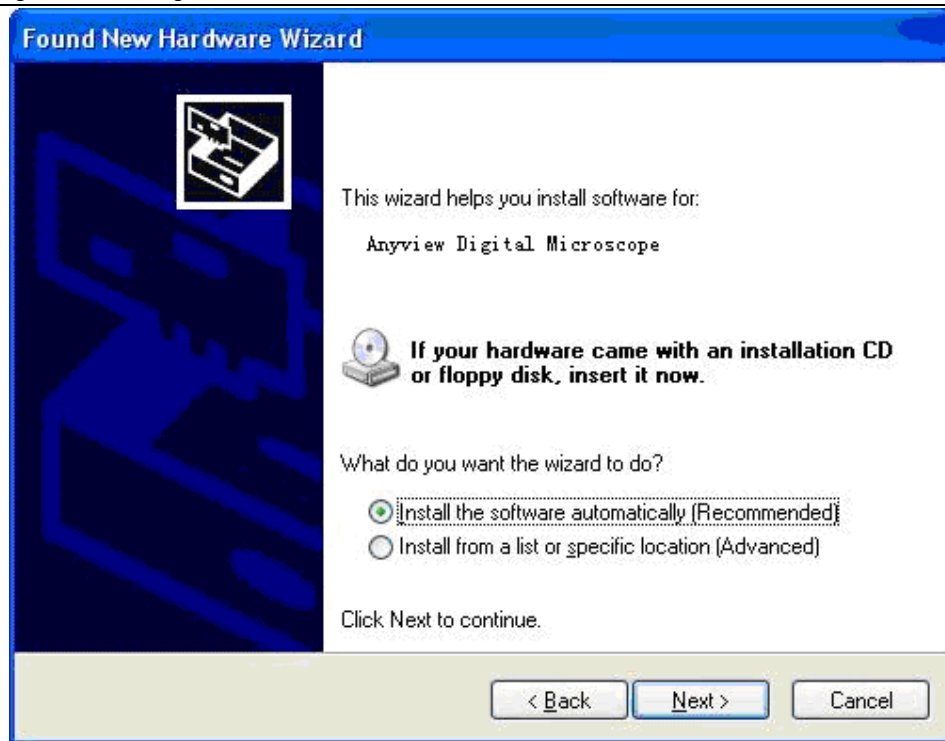


7. Please connect Anyview digital microscope to the computer and power on. You will see the following popup window.



8. Please select "No,not this time" and click "Next" to continue.

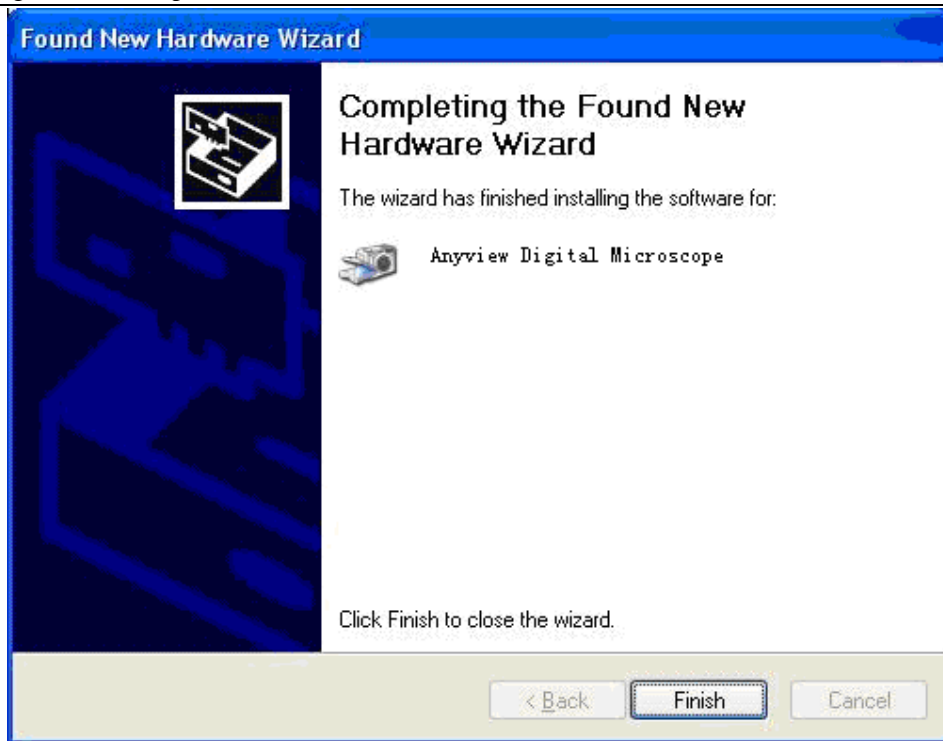




9. Please select “Install the software automatically (Recommended)” and click “Next” to continue. It would popup the following window.



10. Please click “Continue Anyway” to continue till popup the following window.



11. Click “Finish” to finish all software installation.

Now the software installation was completed, you can use free Anyview digital microscope.

## Window Vista OS Installation

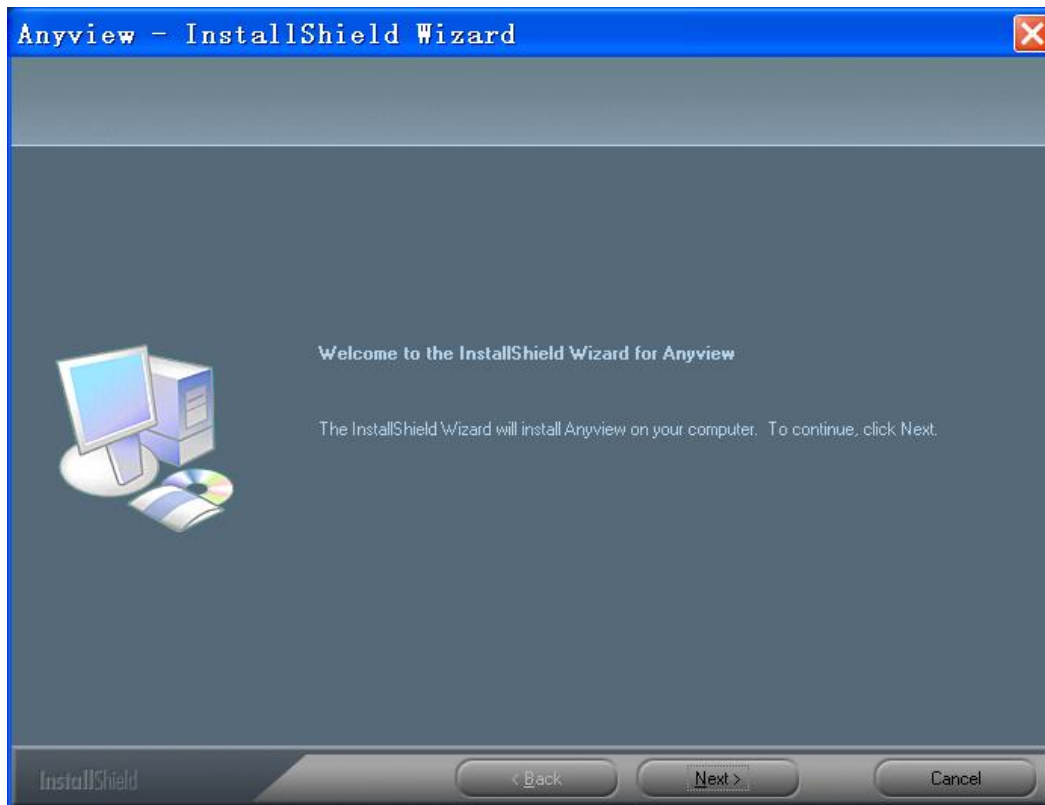
1. Place the installation CD-ROM into CD-ROM drive, the installation program should be started automatically. Otherwise, please execute the AUTORUN.EXE directly from the CD-ROM.



2. Select “Install Software” item, you will see a “User account control” popup. Please press “Allow” to

continue or “Cancel” to abort installation.

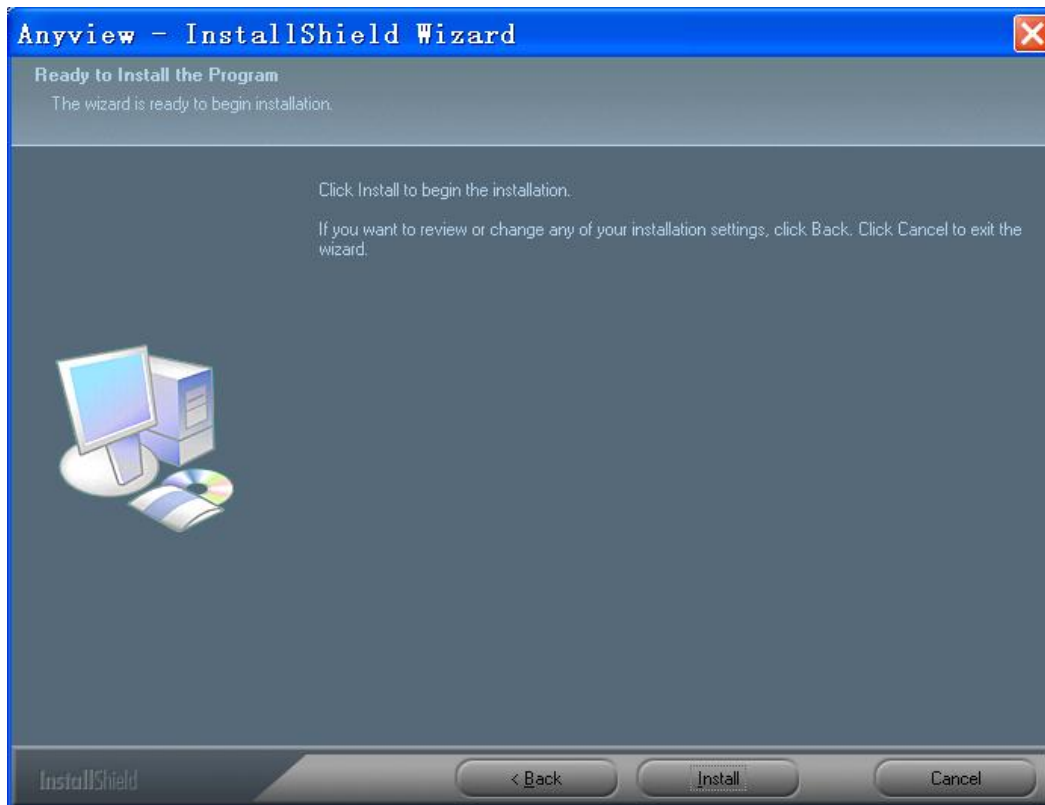
3. You will see the following popup .Press “Next” to proceed or “Cancel” to abort installation.



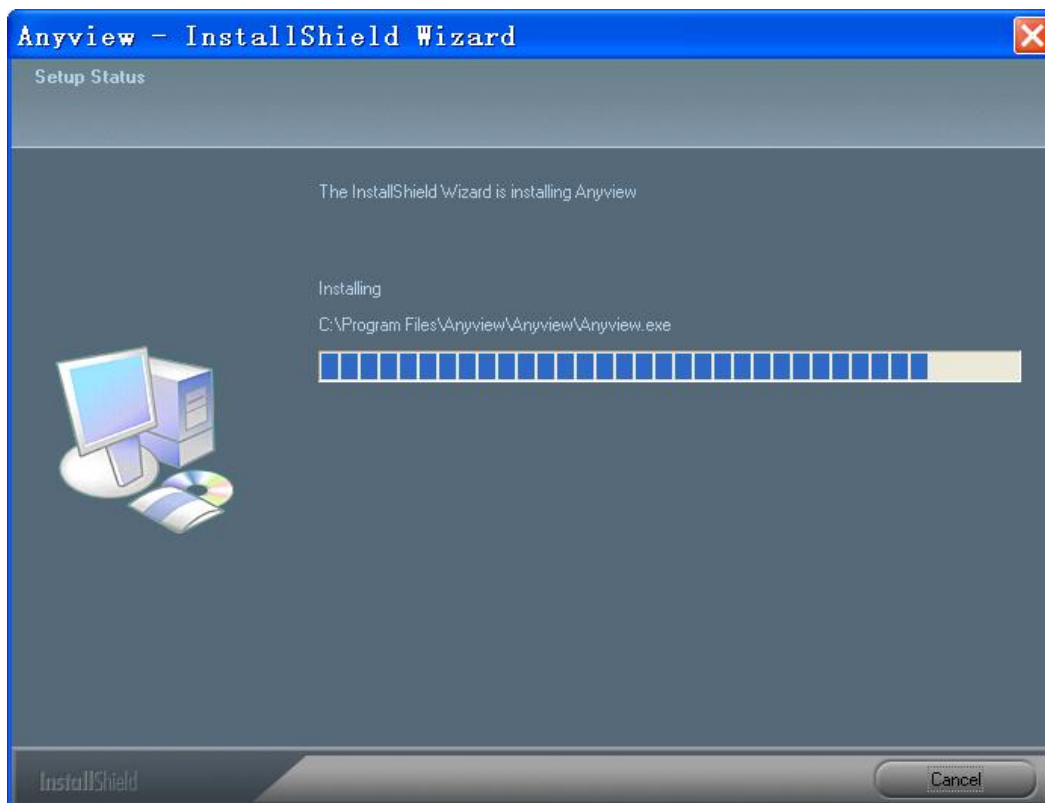
4. You will see the End User License Agreement. If you accept the License agreement, then you can Click the “Next” button which is availability to process, or “Cancel” to abort installation.



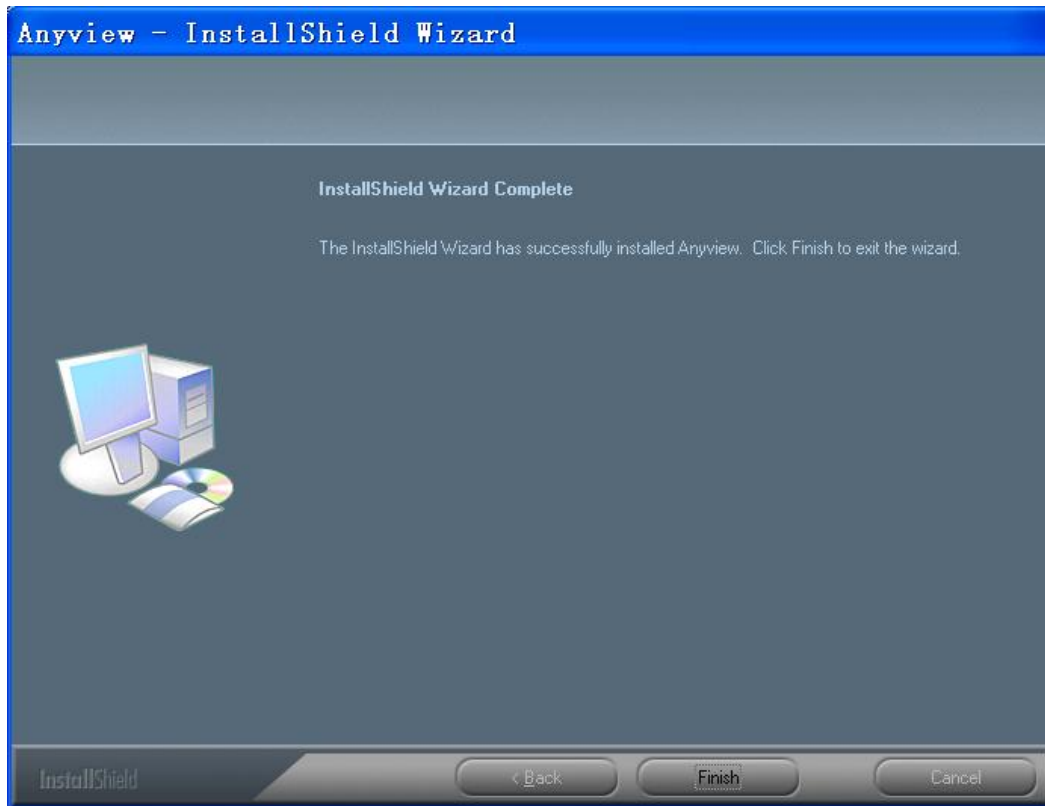
- Click "Install" to start to install the application, click "Cancel" button to abort installation. Click on "Back" to back to read the End User License Agreement again.



- You will see the following progress bar below indicating that the installation is proceeding. Click "Cancel" button to abort installation.



7. Wait until you see the following popup and press “Finish” button.



8. Please connect Anyview digital microscope to the computer and power on. System will automatically search and install the driver. Wait until you see this message that system show “Your new hardware is installed and ready to use”.



Now the software installation was completed, you can use free Anyview digital microscope.

## Anyview digital microscope Connecting

The following procedure will show you how to properly connect Anyview digital microscope with your PC.

- i. Connect Anyview digital microscope to the computer and power on.



- ii. The Anyview digital microscope has 1 switch for power on and LED adjusting on one side as shown:

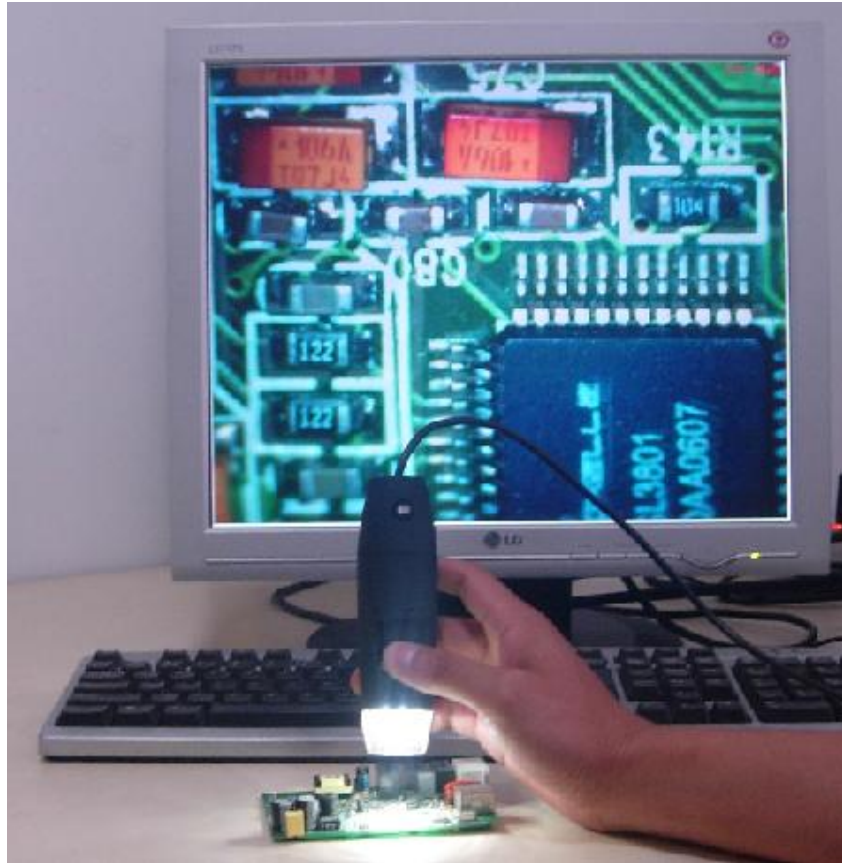




## Anyview digital microscope operation

The following operation will show you how to operate Anyview digital microscope.

- ①. To have a right image, suggested holding Anyview digital microscope as shown:




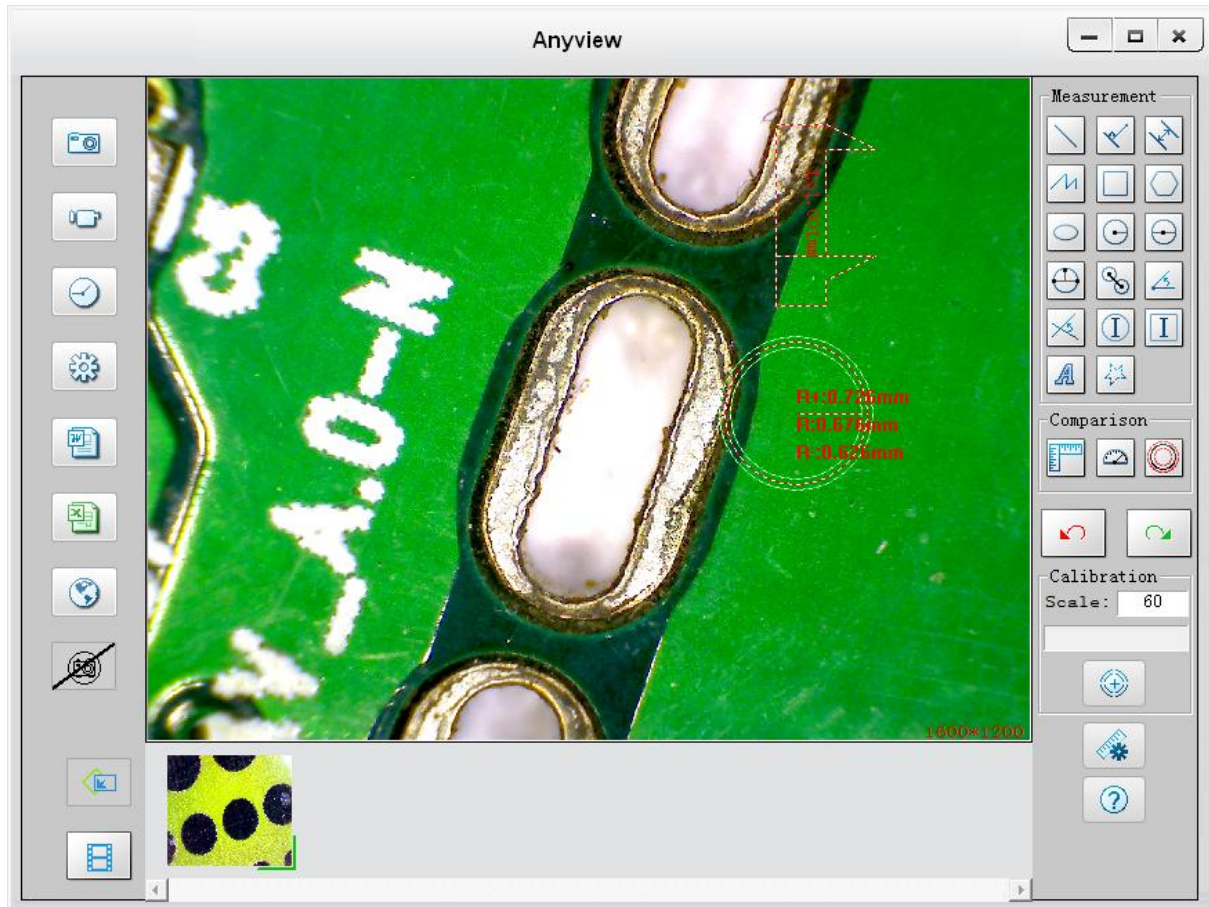
- ②. Put the to-be-observed object near the Anyview digital microscope, the distance between both (object distances) don't exceed to 30CM.
- ③. Adjust the focus: Use any finger to rotate the roller, till the image is clear.
- ④. The Zoom time will be larger as Anyview digital microscope is closer to the observed object.
- ⑤. When the observed object is located at the top of the transparent cover, there are two focus positions you can be found by rotating the roller: long cover—60X and 200X; short Cover—80X and 150X. If you want other zoom time, you must adjust the object distance and ever must take off the transparent cover to adjust it.

## Anyview Application

Note: Before start Anyview program, please make sure Anyview digital microscope has been connected to PC and Power on.

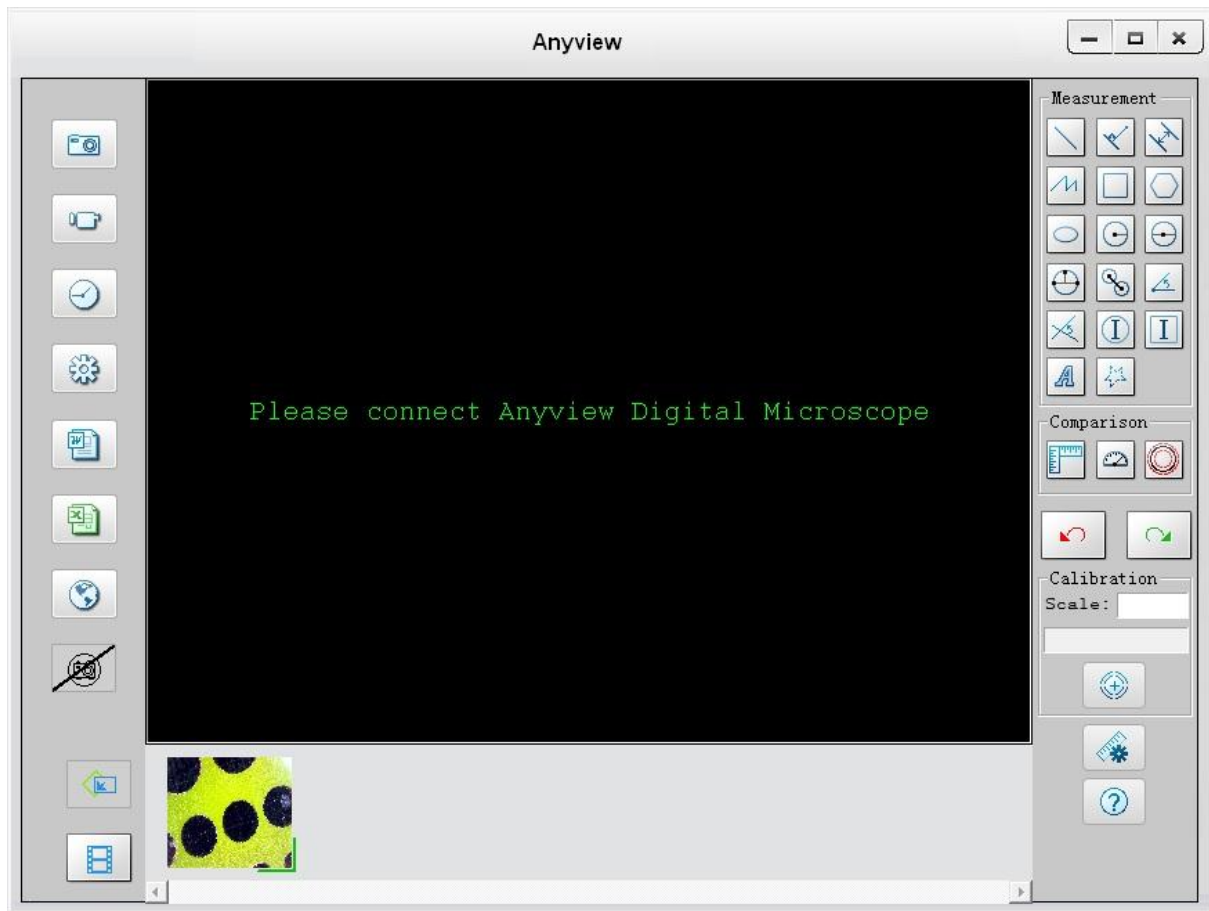


Double-Click Anyview icon on desktop  , the Anyview main screen will be shown as below:







If Anyview digital microscope has not been found while opening the Anyview program, the message will be shown as below:

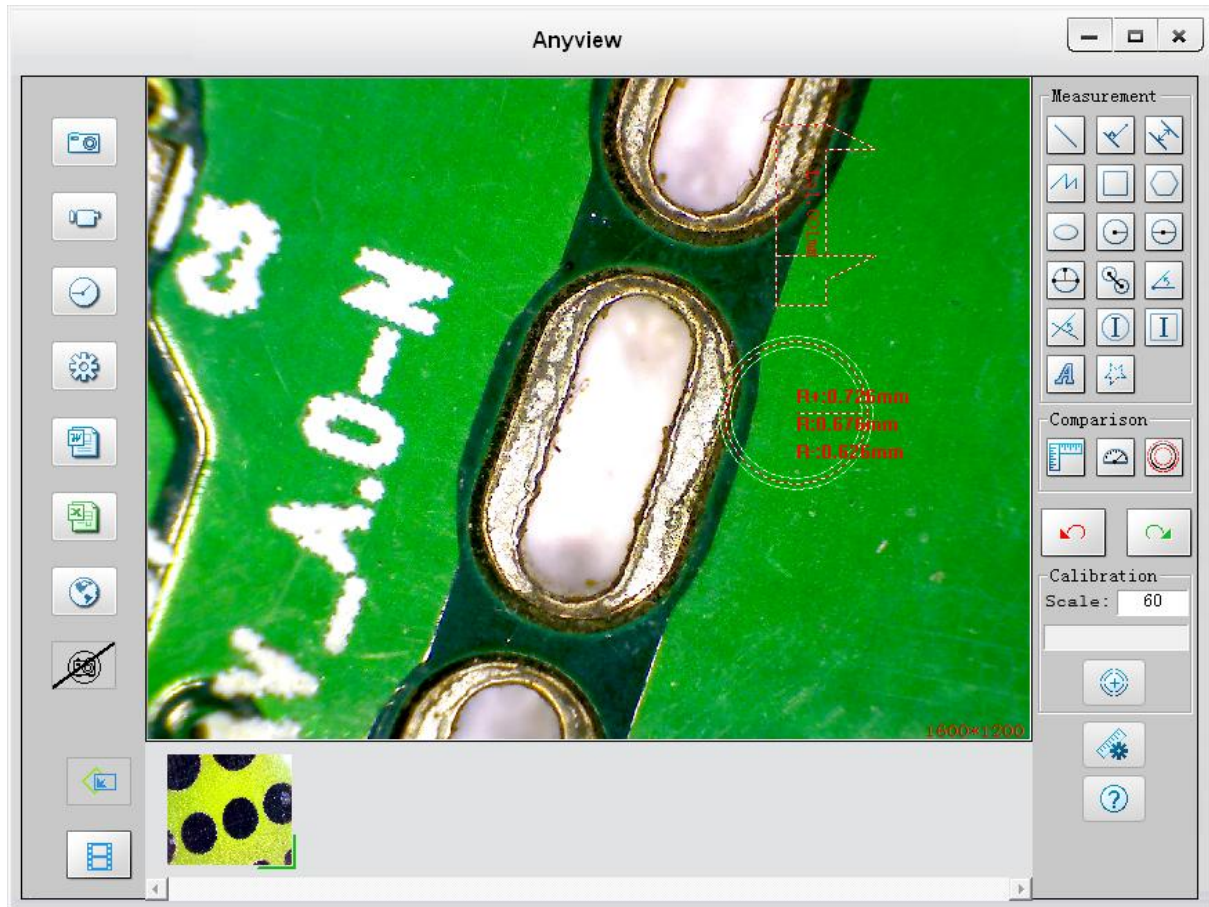


## Take Photo



You can take Photo by clicking the  Button or press this  button on Anyview device (Note: This is Photo folder as below)

**Hotkey: F2**



## Take Video

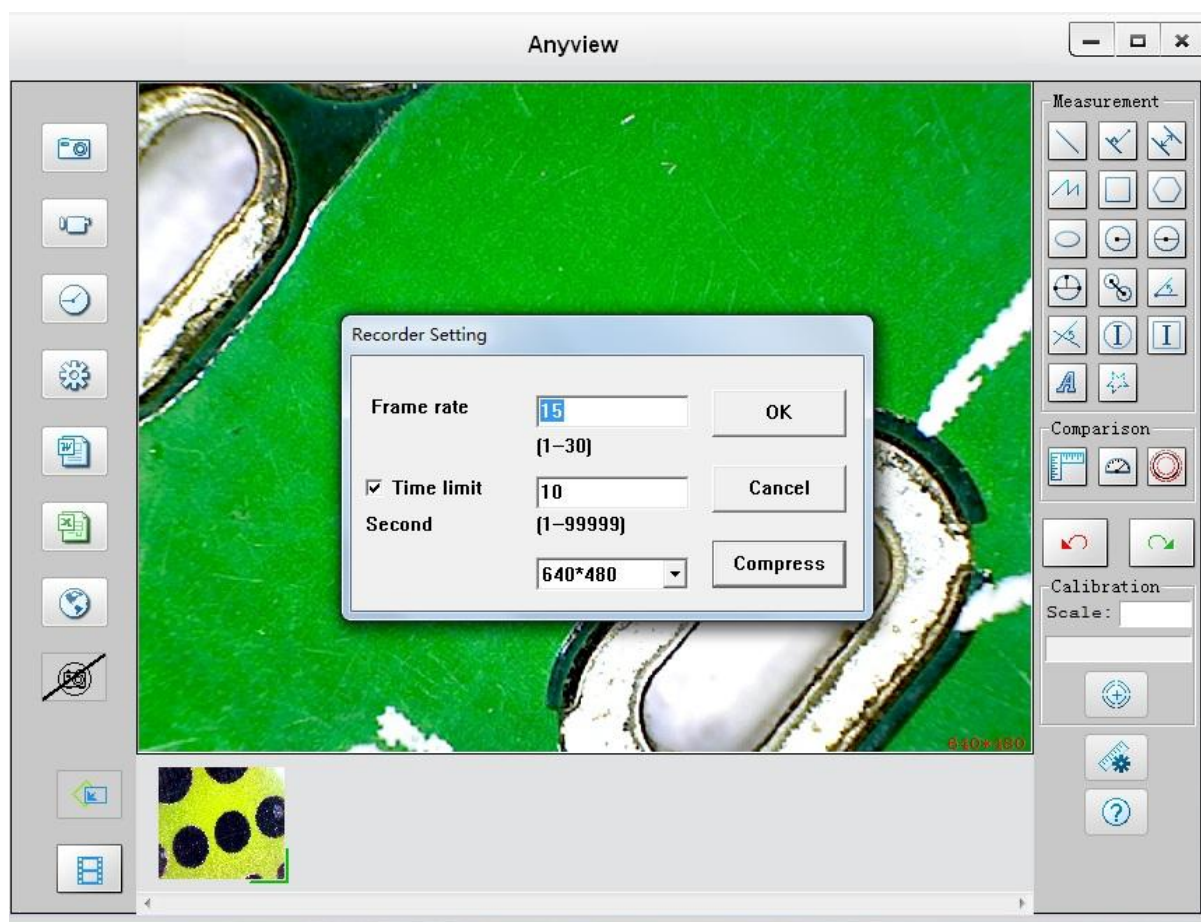


The Video can be taken by clicking  Button. (Note: This is Video folder as below).


Recorder setting:

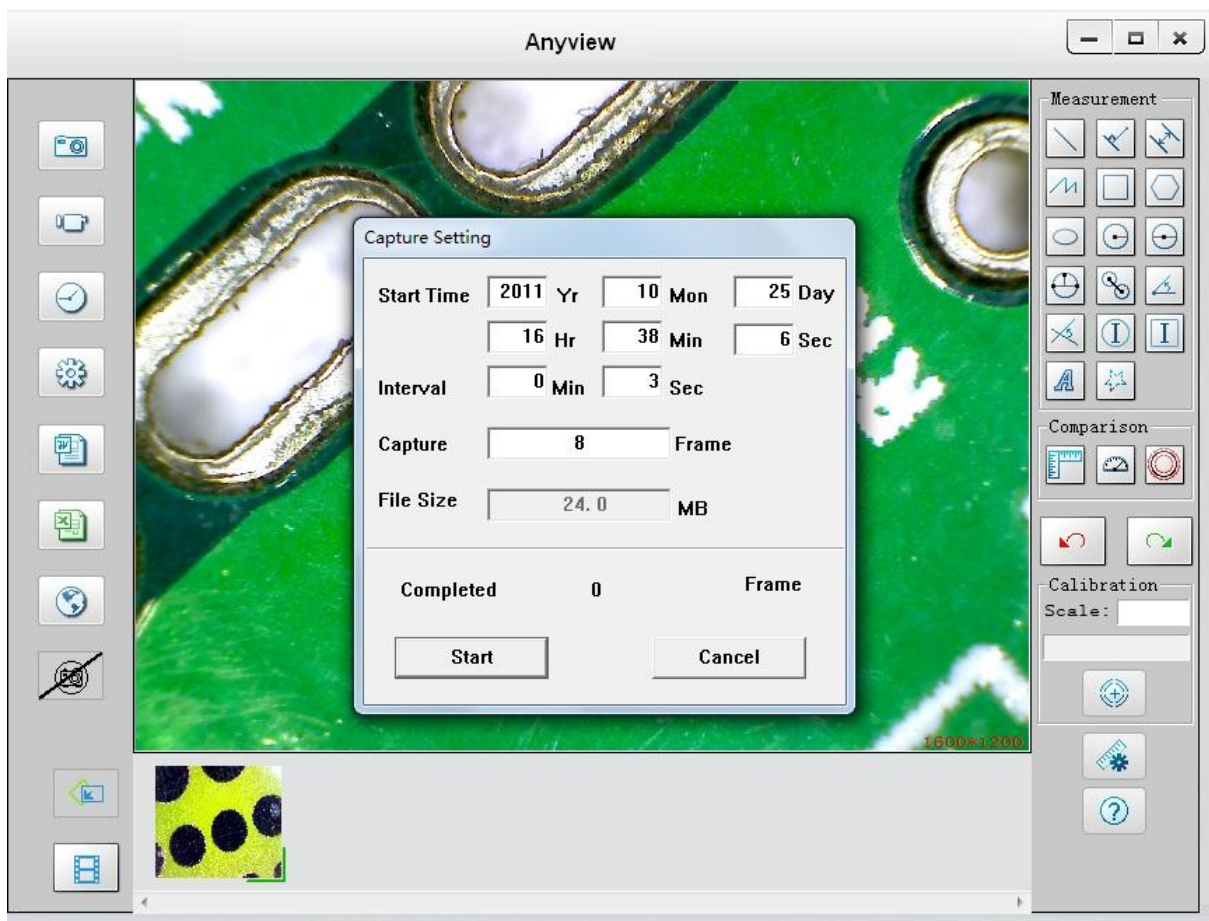
1. **Frame rate:** it is the number of frames or images that are projected or displayed per second. The number range is 1~30
2. **Timer limit:** it is the time of video recording to avoid video file size exceed to the space of disk. The number range is 1~99999
3. **Compress:** click it and you can select the video compressed format to reduce video size. It loads automatically compress programs according to your PC system. The video quality may be varied with different compress program.

**Hotkey: F3-Start, F4-Stop**




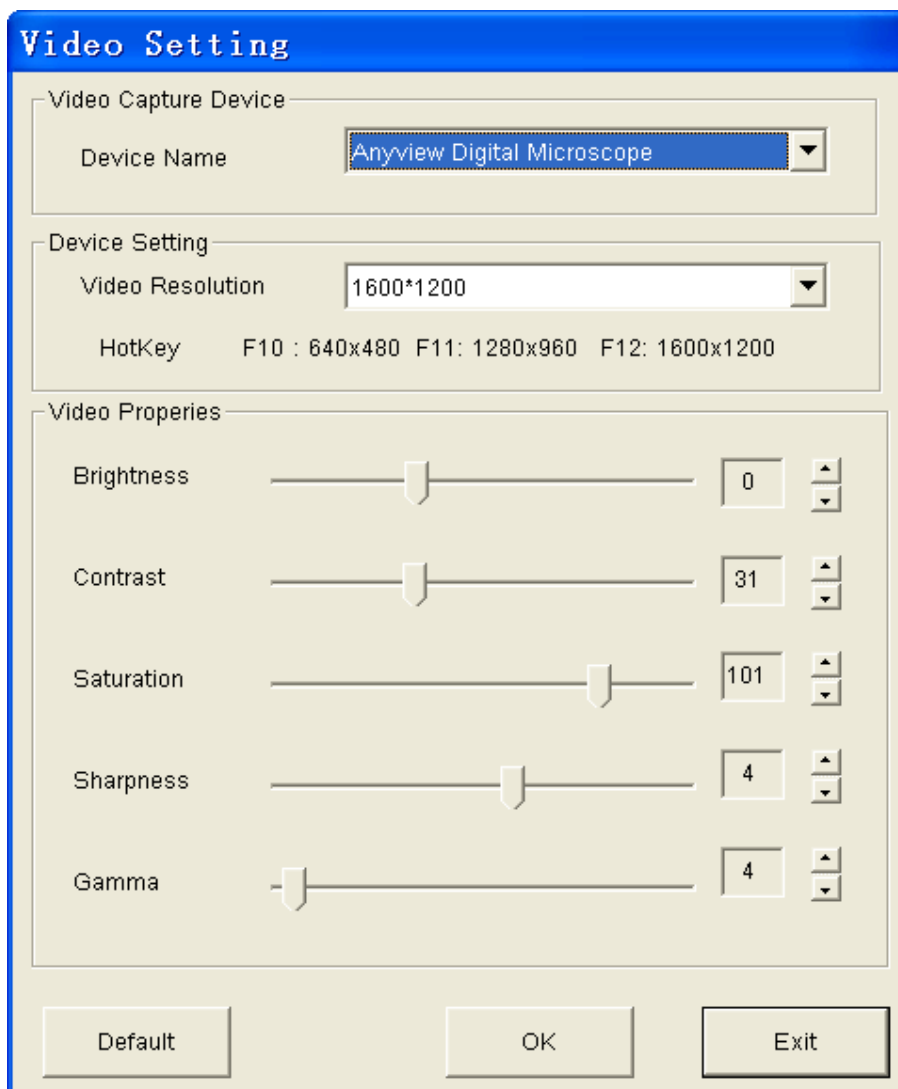
## Take time lapsed Photos

You can take time lapsed Photos by click the  button as below shown:




## Video Setting


You can set video property by Clicking  Button as below shown:



## Export to word


You can export your measurement data to word document by Clicking  Button.

## Export to word

You can export your measurement data to excel document by Clicking  Button.



## Change Language


Anyview software supports Multi-languages, so you can change any languages by clicking  Button.

## Snapshot Enable / Snapshot Disable


You can control the manual snapshot by the  button. or  button, the default is disabled manual snapshot.

If you disable the manual snapshot, you can speed up the video preview speed.

## Photo Folder

Photo Folder  is on the button side of the program, which contains the thumbnails of Photo captured by the program.

## Video Folder

Video Folder  is on the button side of the program, which contains the thumbnails of video captured by the program.



The Photo or video has been saved



The Photo or video has not yet been saved.



The Photo or video is selected, the mouse stay there, then click the right key of mouse to pop a menu, or click the related buttons of tool bar ,it can be viewed by double-clicking、be saved、be mailed、be opened to edit、be deleted.

## The Real-time measurement



: Line Measurement



: Dot-to-Line Measurement.



: Parallel Line Measureent.



: Continual Line Measurement.



: Rectangle Measurement.



: Polygon Measurement.



: Ellipse Measurement.



: radius Circle Measurement.



: Diameter Circle Measurement.



: Three Points Circle Measurement.



: The distance of two circles Measurement.



: The Angle Measurement.



: Four Points Angle Measurement.



: The circle Label adding.



: The square Label adding.



: Text adding.



: Continual line mark.



: Length-Line: set a Ruler on Video for comparison



: Angel-Line: set a protractor on Video for comparison



:Tolerance-Circle: set a circle with tolerance on video for comparison



: Undo.

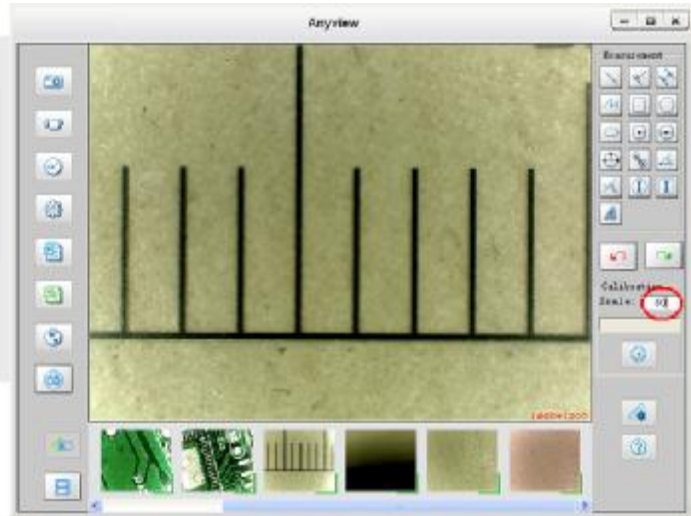
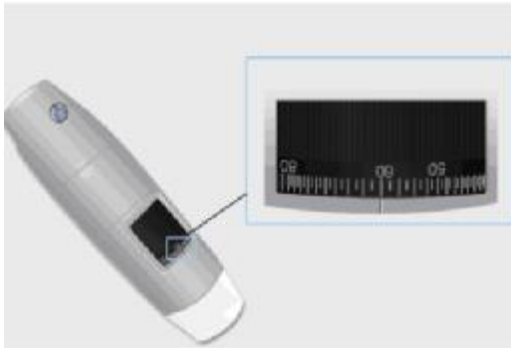


: Redo.



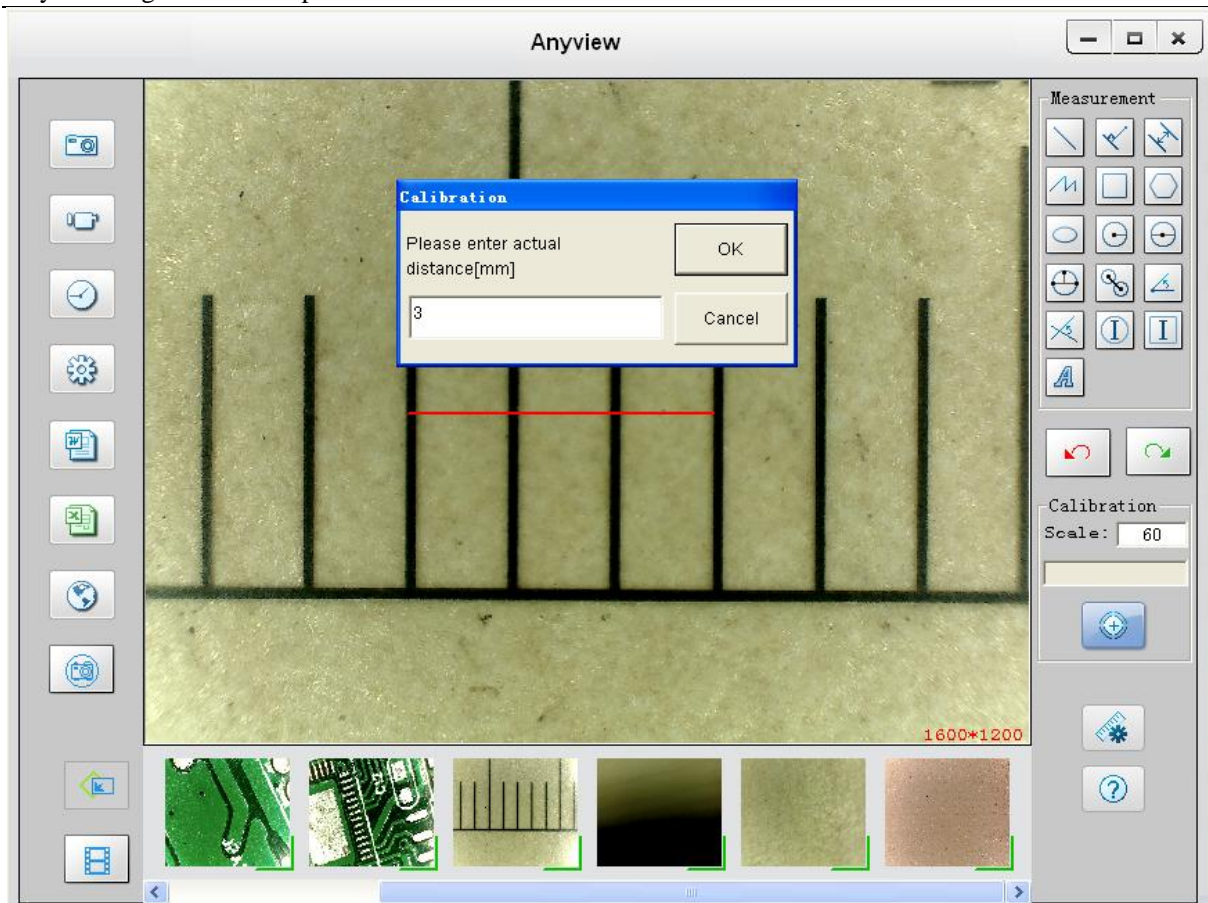
: Calibration on real-time video . (Below is calibration manual on real-time video)

1. **The first step:** Select a known measurement standard as the to-be-observed object, such as a ruler, to be used for calibration. Bring image of the selected ruler into focus by turning the “Focus & Magnification adjustment wheel”, determine the magnification by taking a reading from the scale on the focus dial, enter the scale value in the “Scale” box in the right size of the screen.

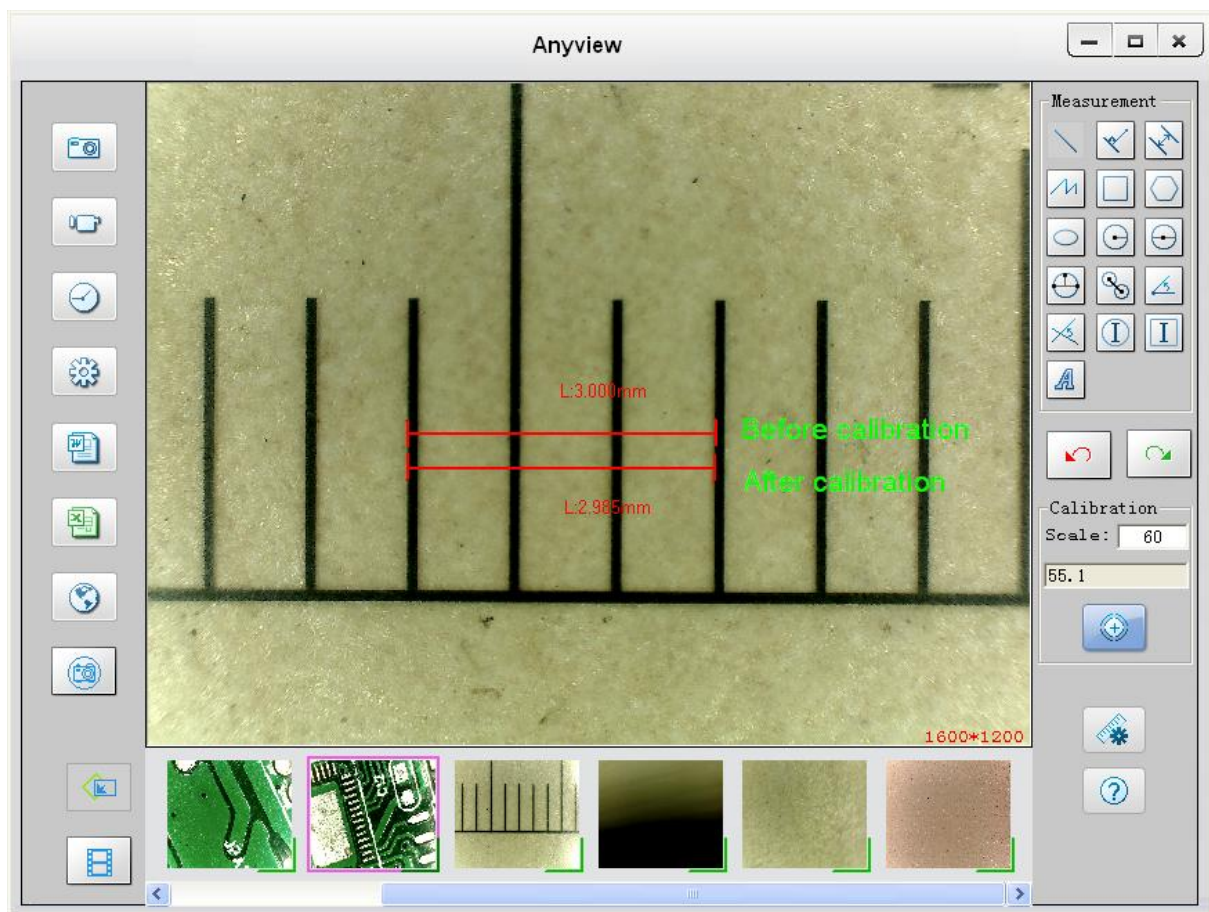


2. Now click the button of calibration to take a sample measurement of the selected calibration standard by clicking beginning and ending points across the known measurement value (such as 3mm), and then enter the exact known value of the measurement sample (3mm in this example) when the window of Calibration pop-up and then click “OK”.

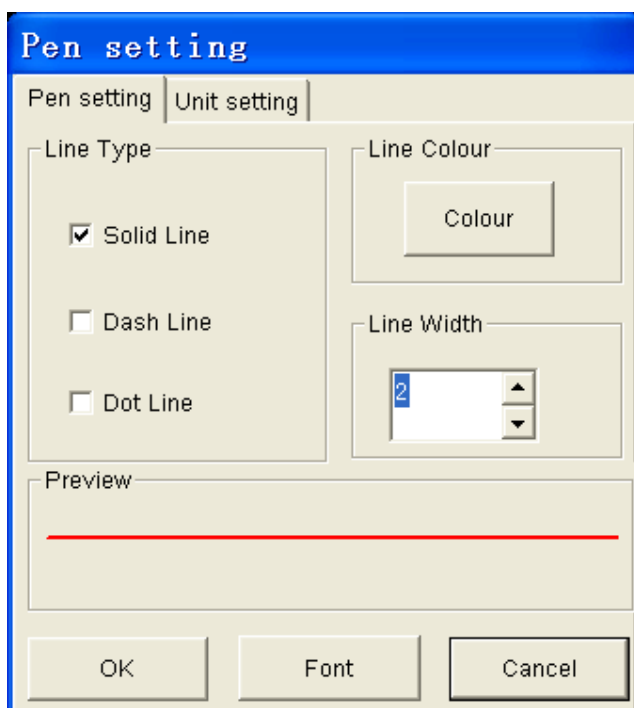




3. The software will automatically calibrate the scale of magnification and will show the calibrated scale of magnification at the right-hand box of calibration button.



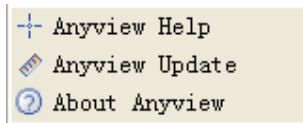
: Measurement Setting.





: About.

Click “About” button to pop-up the following message:



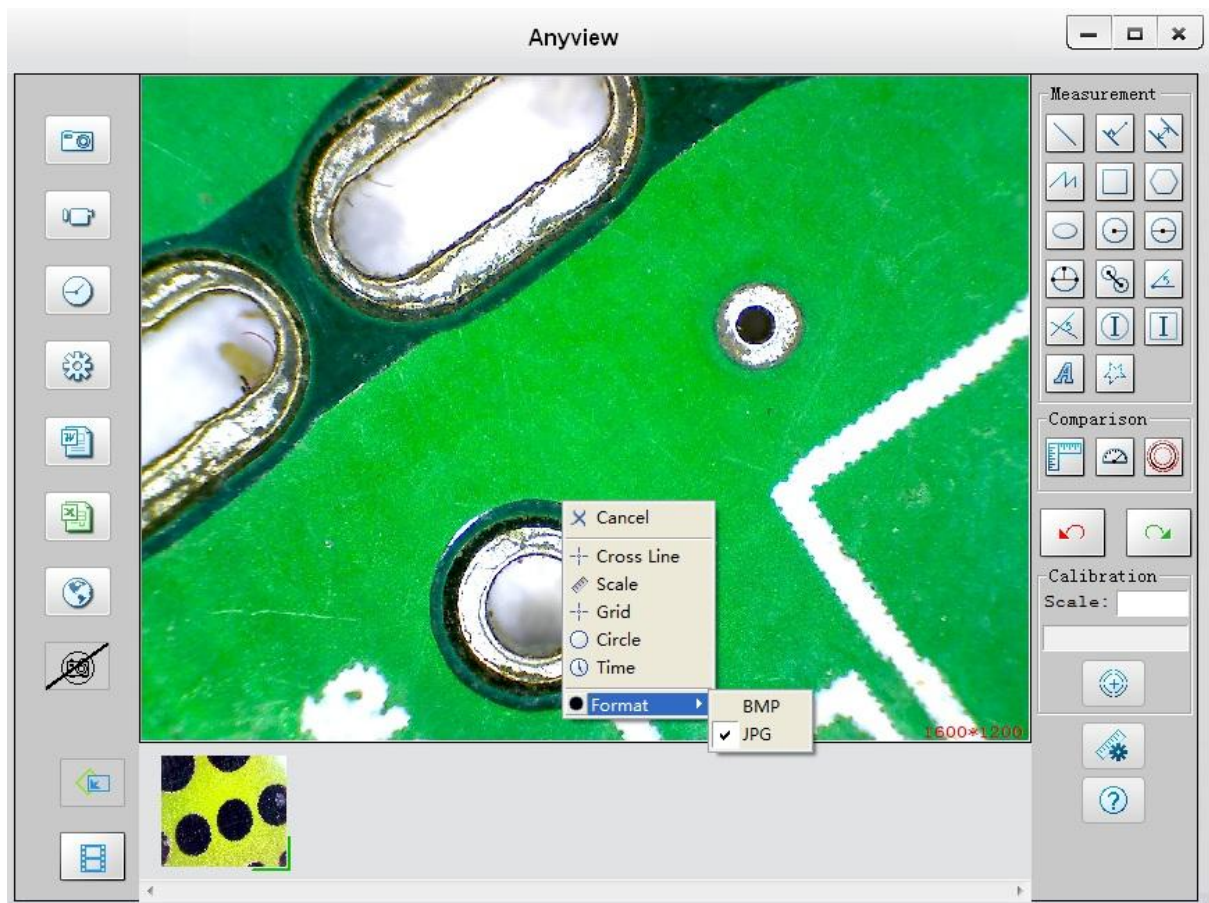
1. Anyview Help: will help you how to use Anyview software.
2. Anyview Update: you can click it to see if there is any software update.
3. About Anyview: you can check your present version as shown:

## Scale

For measurement, it was suggested that put the magnification before capturing on right-hand side on the program **Scale: 60**, the magnification is the value on scale of Roller.


## Addition Functions by clicking right-key on video

Click right-key of mouse on video, will pop-up the following window:





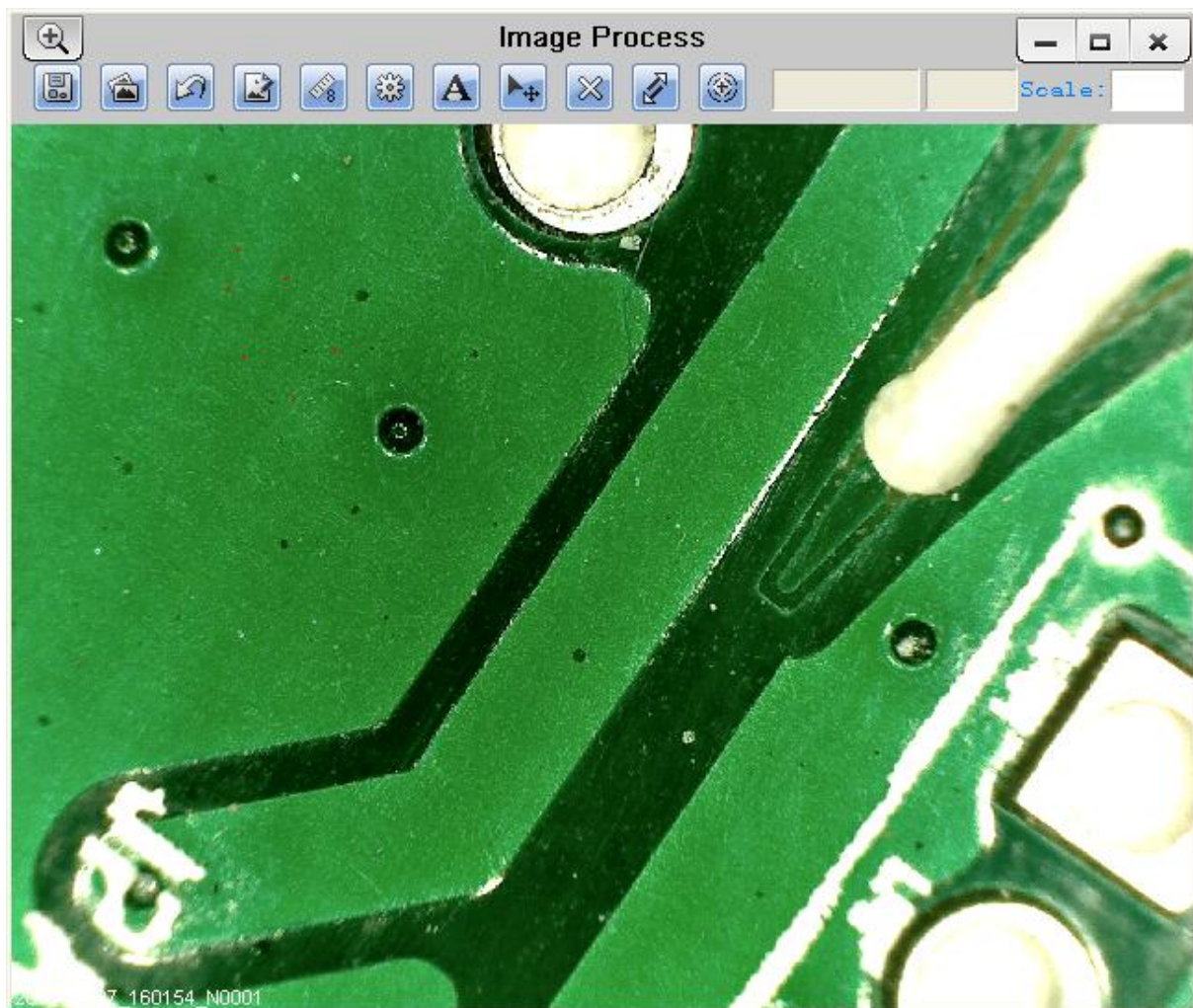
## Full Screen Display and return

These displays of real time preview can be enlarged to full screen by clicking the  icon on right-top of program screen.

To return from full screen display mode, please press “ESC” key of keyboard.

## Image Process

You can double-click the selected Photo in Photo folder to measure and view it as below shown:



For measure, please put the magnification if there is not number in Scale box. The number is the scale value of roller at the baseline you captured this image.

Image file name: Still\_yyyy-mm-dd\_hhmmss\_nnnx\_Nxxxx is combined by date, time, magnification and serial number. For example, Still\_2009-03-06\_102949\_060X\_N0002 figures: Number is 0002, magnification is 60, date is Mar-06-2009, time is AM10:29:49.

The program will auto load the magnification when you measured it if you put the scale before you

capture the image.



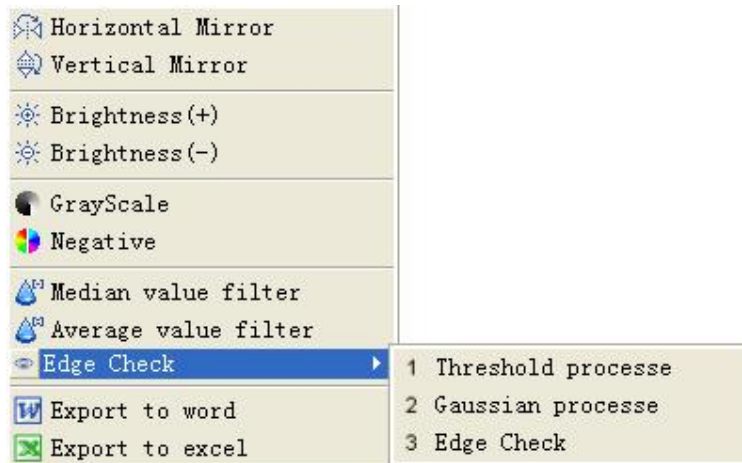
: Magnifier.



: Save as.



: Image Process. (Detailed manual as below)



Horizontal Mirror:

Vertical Mirror:

Brightness(+): Increase the image brightness.

Brightness(1): Decrease the image brightness.

GrayScale: Transform the Image into 256 color Image.

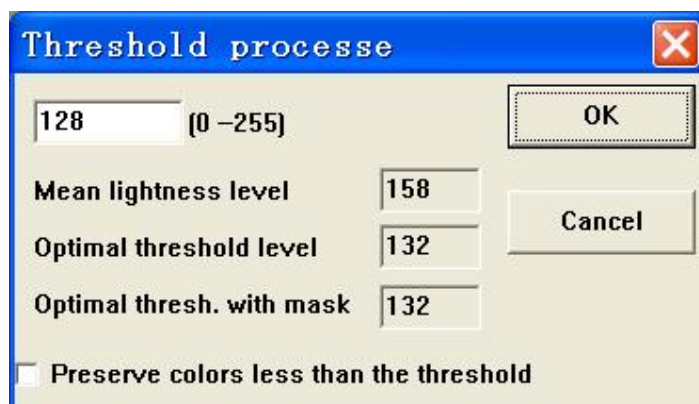
Negative: Transform the image into reversed color image.

Median value filter: Use median value algorithm to filter the image mixed spot.

Average value filter: Use average value algorithm to filter the image mixed spot.

Edge Check: If you want to obtain the very good effect about edge check, Please do as follow:


**Step 1.** Please select “Threshold process”, then pop-up the follow Window:





You can choose the different value according to the different image (Mean lightness level \ Optimal threshold level \ Optimal thresh. with mask).


**Step 2.** Please select “Gaussian process” and use Gaussian algorithm to filter the image mixed spot.


**Step 3.** Please select “edge check” to examine the image edge.


 Export to word: You can export the measurement data and image to word document.

 Export to excel: You can export the measurement data to excel document.

: Cancel the image processing.

: Paint: you can draw “Line, Continuous Line, Angle, Rectangle and Circle” etc into the image.

: Measure for “Line, Continuous Line, Rectangle, Polygon, Radius Circle, Diameter Circle, Three Points Circle, Angle and Four Points Angle”.

: Measurement setting.

: Add text.

: Select one metafile which you draw.

: Delete the metafile which you selected.

: Move the metafile which you selected.

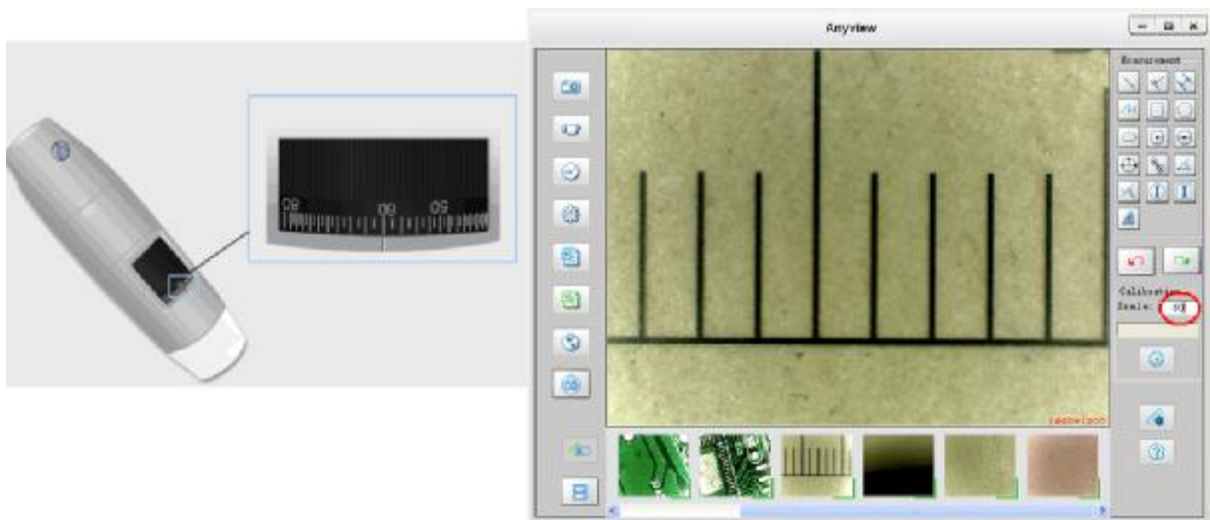
: Calibration on still image.

: Ongoing Operation.

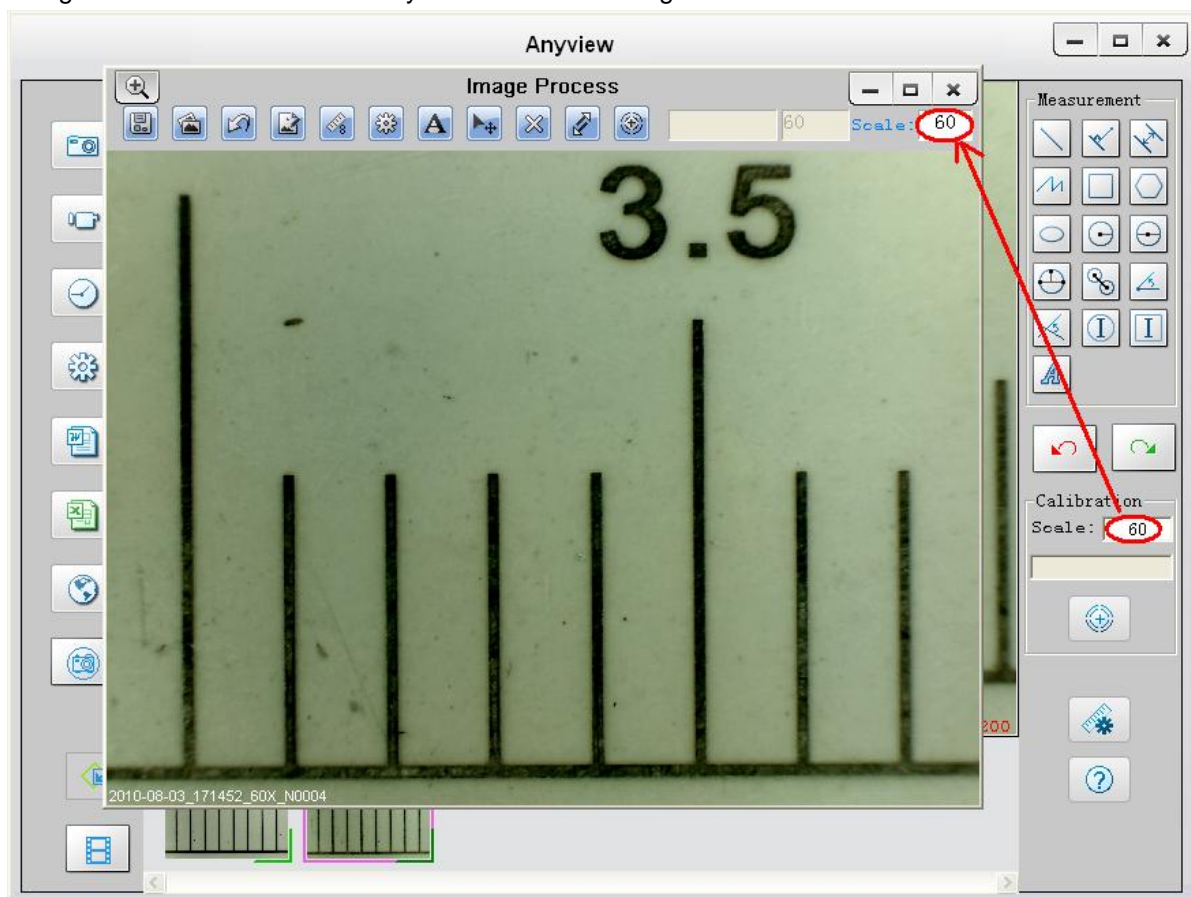
: Magnification

 **Calibration manual on still image**


1. Select a known measurement standard as the to-be-observed object, such as a ruler, to be used for calibration. Bring image of the selected ruler into focus by turning the “Focus & Magnification adjustment wheel”, determine the magnification by taking a reading from the scale on the focus dial, enter the scale value in the “Scale” box in the right-hand scale box of the screen, and then take the image.

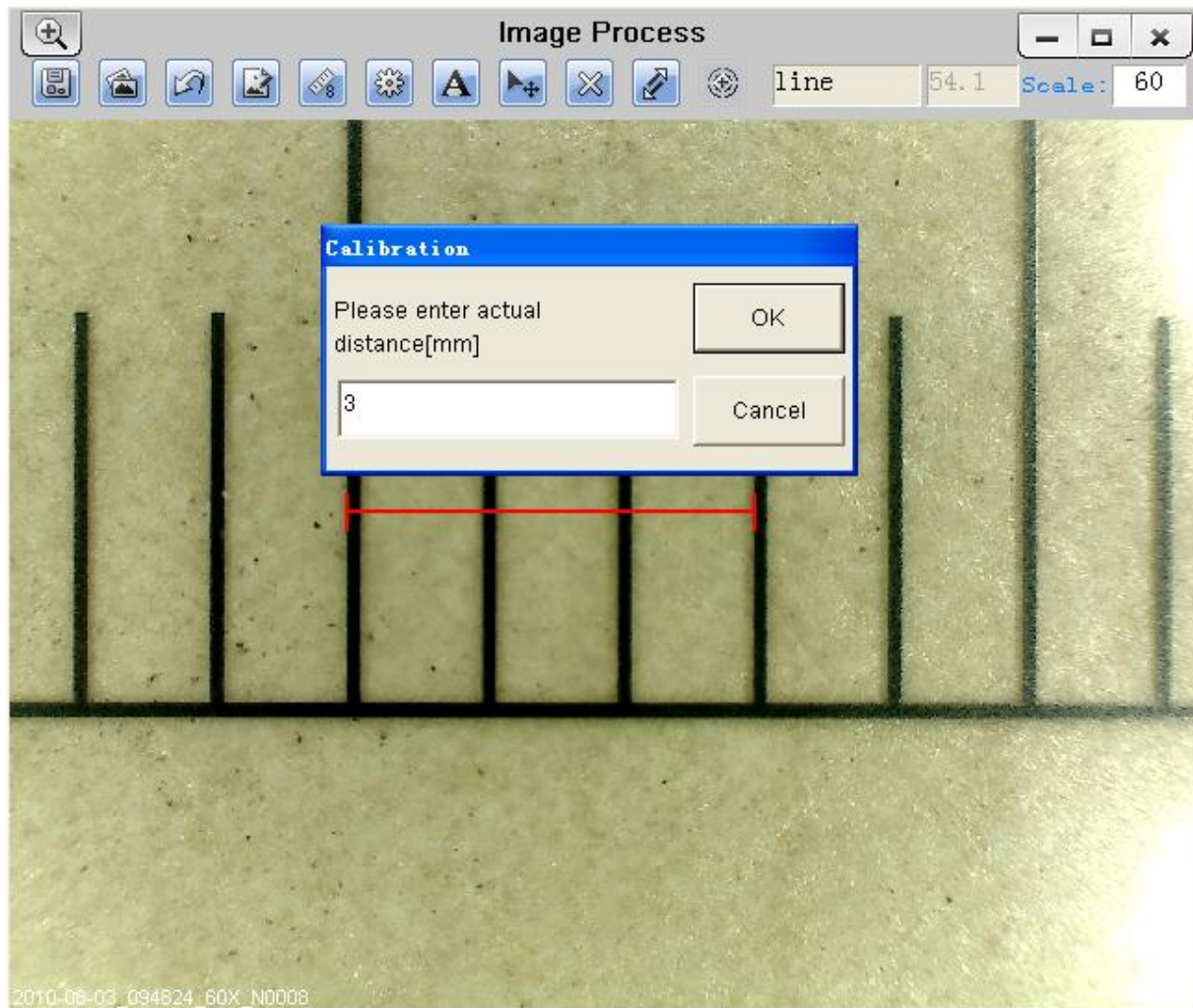


2. Now double click to open the image of the measurement calibration standard, and the scale of magnification will be automatically loaded for measuring.



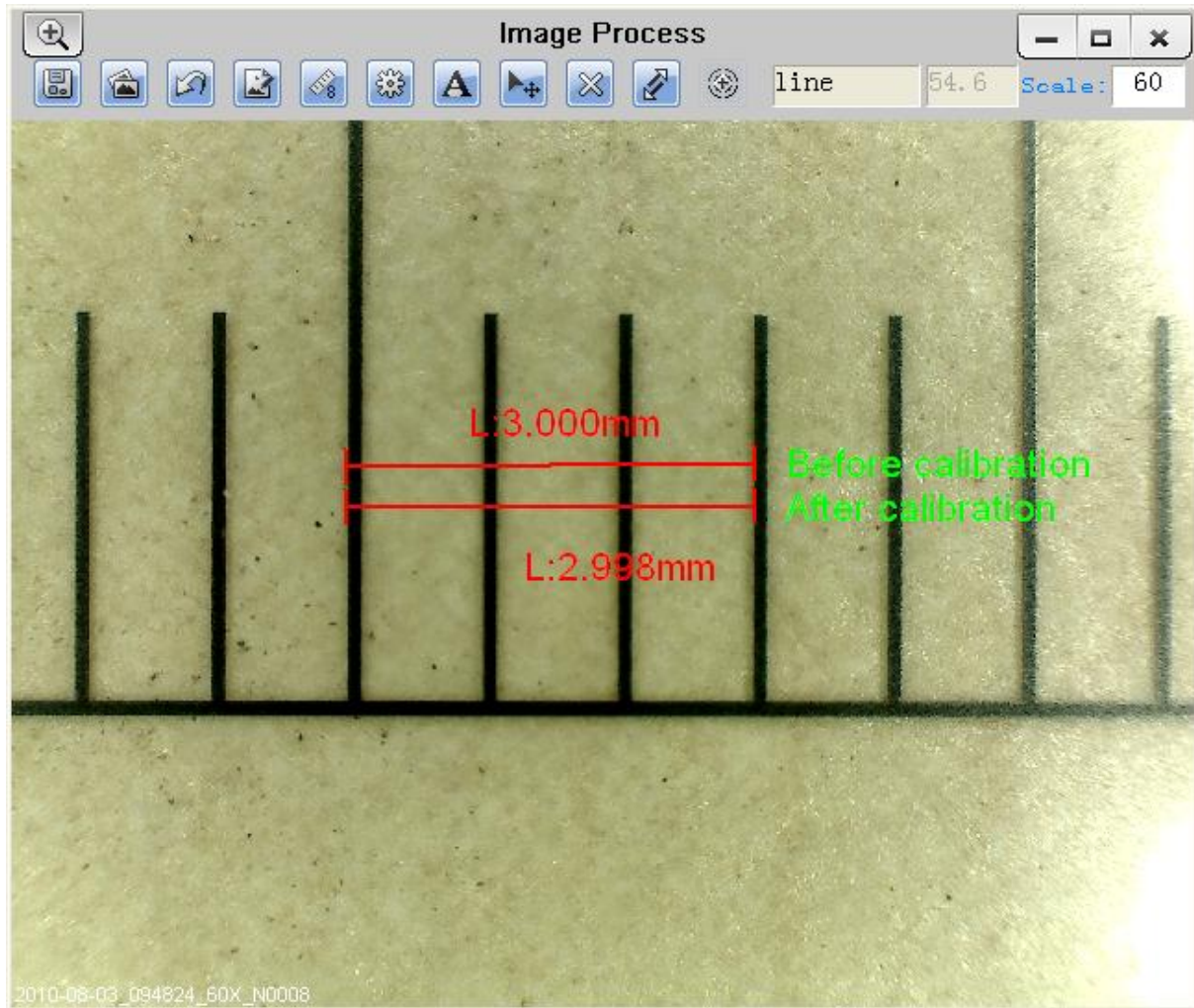


3. Now click the button of calibration  to take a sample measurement of the selected calibration standard by clicking beginning and ending points across the known measurement value (such as 3mm), and then enter the exact known value of the measurement sample (3mm in this example) when the window of Calibration pop-up and then click "OK".





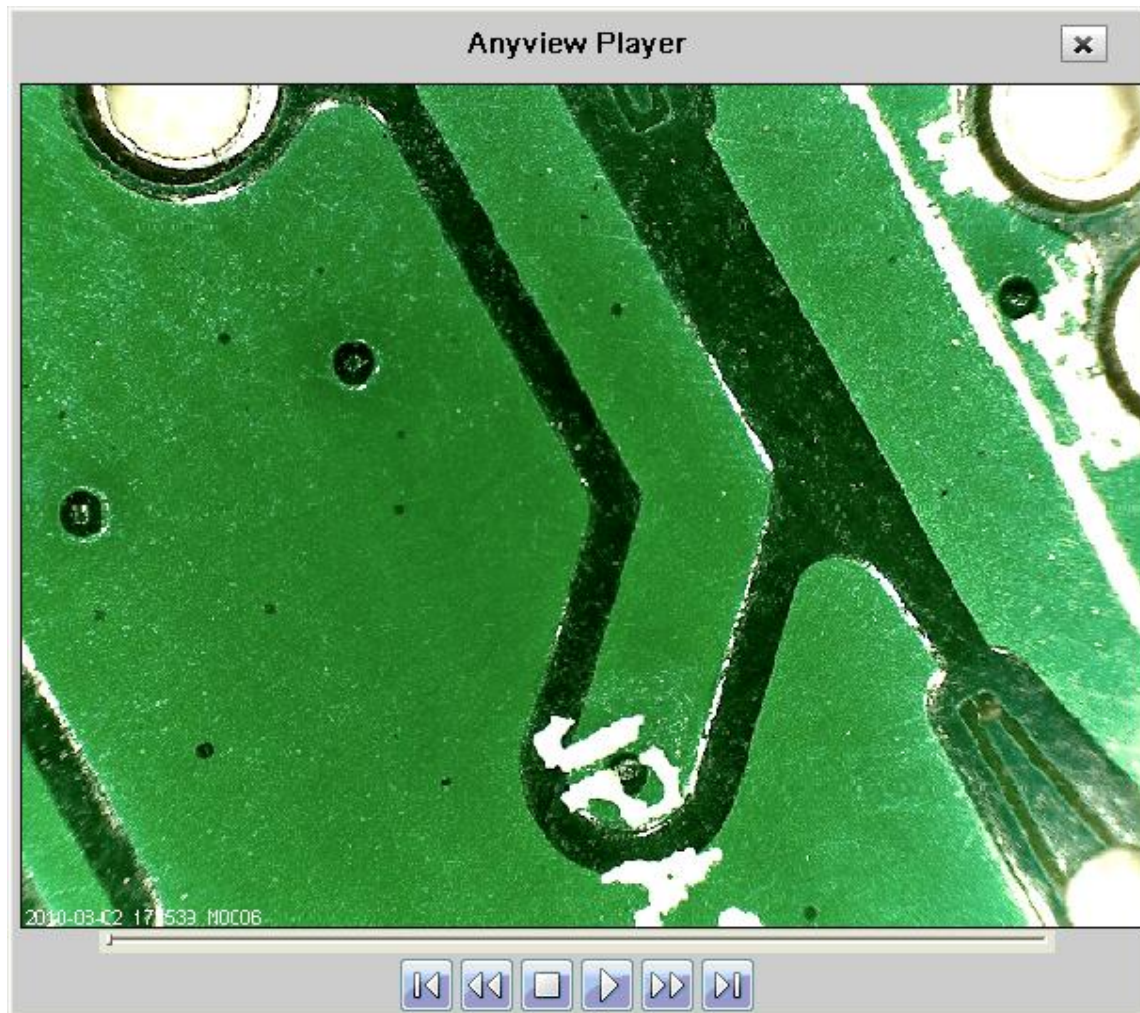
4. The software will automatically calibrate the scale of magnification (for example, 60->54.6) .



5. Now the software is ready to take new images with the calibrated magnification at this focus point (Don't adjust the "Focus & Magnification adjustment wheel"), thus the measurement for these captured images after magnification calibration will be very accurate.

## Anyview player

You can double-click the selected video in video folder to play back it as below shown:



## Troubleshooting

### Common Fix

- A.** If Anyview Microscope and Anyview application were working OK and suddenly stops working properly, Please try the following:
  - 1. Unplug or Power off Anyview microscope from PC, close Anyview program.
  - 2. After waiting for 1 minute, plug or power on Anyview microscope, open Anyview program
- B.** For under **Recommended PC specification (see 4<sup>th</sup> page)**, maybe Anyview program does not work properly, please use Anyview-Beta.exe on CD: run it directly—double click.
- C.** For Vista first version OS system (Nor Vista SP1), maybe there is this issue: there are not any images

(black screen) on preview area, please try: Toolbar->setting->default->Ok)

**D.** After PC resume from standby or hibernate, maybe Anyview will not work properly, please close it and re-open to try.

**E.** If Anyview digital microscope driver can't be installed completely, maybe your pc OS is not XP SP2 or above, please update it. If you installed the driver and application completely, but there is a tips: please connect Anyview digital microscope after running the program, please uninstall Anyview and reboot PC, then re-install Anyview to try again.

## Q&A

Q1. Why the object cannot be found on the display of the Anyview microscope—black screen?

A: a. **If your PC USB port is USB 1.1 nor USB2.0, please use Anyview-Beta.exe on CD to try.**  
b. **Please try to connect Anyview to another USB port, one by one to try.**

Q2. How to install Anyview application and driver?

A: a. Do not connect USB cable to Anyview Microscope before driver installation completed.  
b. Place installation CD into CD-ROM drive, and select "Install Software" to install.

Q3. How to uninstall driver and Anyview software?

A: In order to uninstall Anyview software, click on the uninstall utility from the Start button ->Control Panel -> Add or Remove Programs.

Q4. When connecting to PC, why the real-time display is slow or unsmooth?

A: a. Probably your PC's configuration is not sufficient enough. Please check the **Recommended PC specification** as mentioned in this User's Manual.  
b. Probably your PC's CPU or memory is overloaded by executing too many applications software. Try to close applications or restart your PC to release the memory.  
c. Probably your system has being attacked by virus, which may dramatically degrade your system's performance.